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**FUJI COMPUTED RADIOGRAPHY**

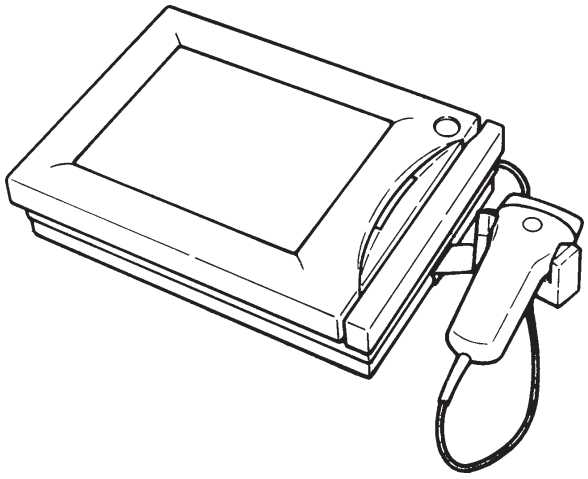
# FCR ID TERMINAL

# ID-T741

# OPERATION MANUAL

**5th Edition**

February 2001



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# FOREWORD

Thank you for purchasing the ID Terminal.

For users to understand the functions of the ID Terminal and use them to the fullest, this manual “ID TERMINAL OPERATION MANUAL” describes in detail how to operate the unit, precautions in operations, etc.

Users using the unit for the first time should read this manual carefully before beginning use. After using the manual, keep it nearby carefully for future reference.

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# INTRODUCTION

This operation manual provides detailed information required for using this unit. To make full use of available functions, read the following sections carefully.

The manual contains the following sections:

**1. PRECAUTIONS BEFORE USE**
Contains basic precautions to be read before using the unit.

**2. INTRODUCING THE ID TERMINAL**
Gives basic information useful before operating the unit.

**3. OPERATIONS (BASIC)**
Describes the basic operations of starting/ending the unit, selecting/inputting, etc.

**4. OPERATIONS (PROCESSING)**
Describes the operations in the routine processing mode.

**5. TROUBLE SHOOTING**
Describes the measures to be taken when errors occur.

**6. MAINTENANCE**
Describes daily maintenance of the unit.

**SEPARATE VOLUME. THE SERVICE MODE OPERATIONS**
Describes operations in the service mode.



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# 1 PRECAUTIONS BEFORE USE

This chapter lists the precautions required to use the ID Terminal safely. Before starting use, read this chapter very carefully and understand its operations thoroughly first.

Safety precautions consist of "WARNING", "CAUTION", and "NOTE" which is a supplementary explanation. Differing in nature, each have the following meanings.

### ⚠ WARNING

Indicates hazardous situations which may lead to serious injuries or even death if the precaution is not or could not be followed.

### ⚠ CAUTION

Indicates hazardous situations which may lead to mild or medium injuries if the precaution is not or could not be followed. Precautions against accidents causing only physical damages.

NOTE

Gives procedures requiring special attention, instructions which must be followed, supplementary explanations, etc.

## ⚠ WARNING

This model supplies high voltage to the inside of unit, etc. The following instructions must be carefully followed to prevent an electrical shock.

- No one other than service engineers should open the unit cover. Do not touch the high voltage portion of the above-mentioned parts with your hand, or you may get an electric shock.

## ⚠ WARNING

The supply voltage of the units comprising this system is AC100V to 120V or AC200V to 240V.

The instructions below must be followed to prevent an electrical shock.

- Install the unit where no water may subject the units.
- Check that the ground of each unit has been perfectly connected.
- Check that all the cables have been properly and perfectly connected.

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# 21 INTRODUCING THE ID TERMINAL

## 1 Outline of the Unit

The ID terminal is a unit that registers the ID information and various parameters of images in the FCR Image Reader when using IPs (imaging plates) to take radiographs.

When radiographs are taken using IPs, the images will be read by the FCR Image Reader. At the same time, the FCR Image Reader will perform processings for obtaining the best images for reading according to the exposure technique used. To make this possible, the information shown below must be registered with this unit.

☐ **Patient Information**
Information concerning the patient (ID number, name, etc.).

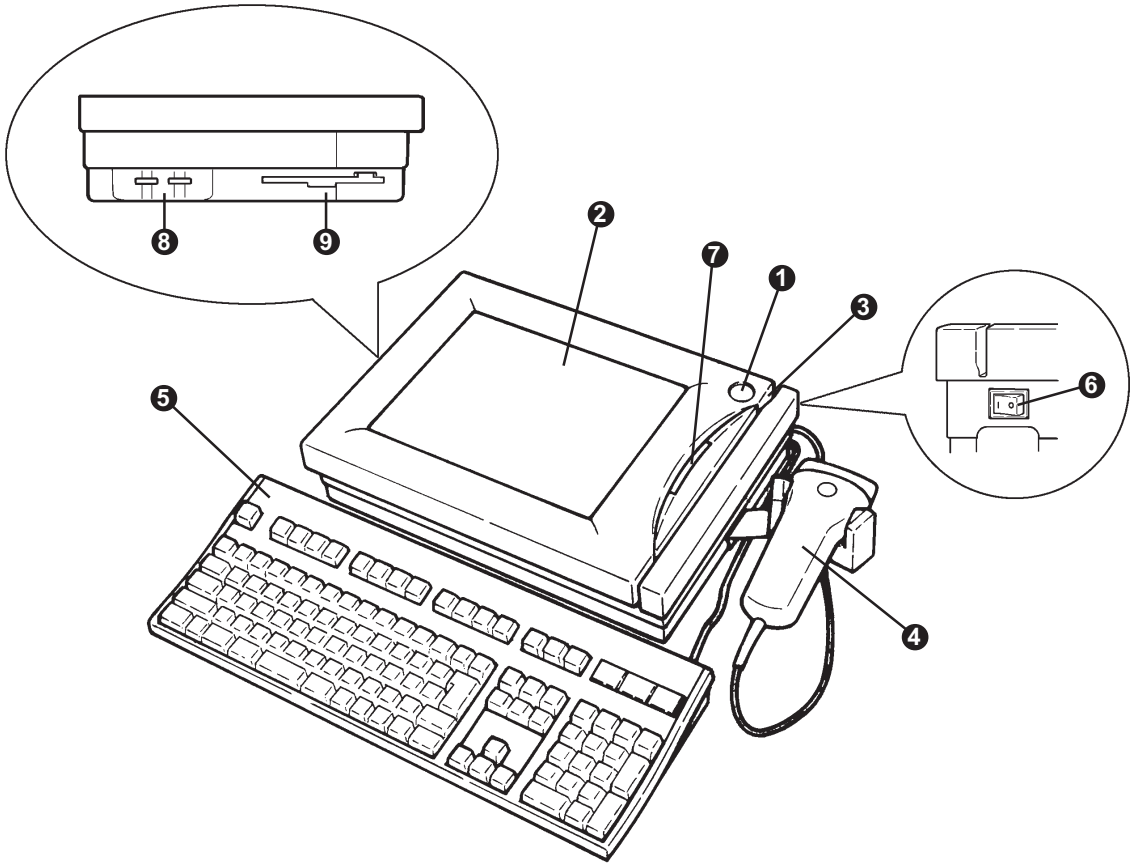
☐ **Exposure Information**
Exposure menu of the image.

☐ **IP Number**
IP number used for exposure.

☐ **Various Parameter**
Parameters concerning image processings (image inversion, film output format, etc.).

This unit is capable of registering the above information collectively at the time of exposure, so that smooth processings with FCR Image Reader are possible. As a result, the operation/ performance efficiency will be improved.

# 2 Name and Function of Each Part



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### ❶ Starting/ending button

Button to start/end the unit.

### ❷ Display

Touch-panel type color LCD display to display operation screen.
If the unit is not operated for a certain period of time, the screen saver will function, and the screen will be undisplayed. In this case, check the indicator to ensure the unit is started, and lightly touch the display. The screen display will be restored.

### ❸ Card reader

Reads the patient information when the ID card is inserted.

### ❹ Bar-code reader

Reads the IP number from the bar-code label of the IP.

### ❺ Keyboard (Option)

Inputs characters and numerical values.

### ❻ Power switch

Power switch of the unit. Always leave it at ON (press “I” side).

### ❼ Indicators

Indicators to show the state of the unit.
There are two indicators: upper indicator and lower indicator. The lower indicator will light when the power of the unit is turned on. The upper indicator will light when the unit is started.

### ❽ Adjustment knobs

Knobs for adjusting the display luminance and beep sound. Refer to page 60.

### ❾ Floppy disk drive

Drive of 3.5-inch floppy disk. Used in the service mode operation.

**NOTE**

- Although the color LCD adopted for the display is manufactured using considerably high degree of technology, there may be a malfunctioning dot in a part of a display. Despite the effort made to minimize the number of those malfunctioning dots, it is extremely difficult to completely eliminate the malfunctioning dots even if the most advanced technology is used. And also, although temperature change may cause a little unevenness of display, it is due to the characteristics of color LCD and not a failure by any means.
- To prevent the bar code reader from being damaged due to dropping, etc., place the bar-code reader on the holder when not used. In addition, placing the bar-code reader on the display may result in the scratch on the display.
- The floppy disk drive is not used in the routine processing mode. Do not mount anything in the floppy disk drive except when required in the service mode.

# 3 Precautions for Installation

This unit is designed for the general office use. The use in an extreme environment may lead to malfunction.

Avoid installing the unit in the following places, where considered to be unsuitable for operating the unit.

- Places where strong magnetic fields are present.
- Places where the unit may be exposed to direct sunlight, the heat from heating equipment, or drastic temperature change.
- Places where corrosive gases may be generated.
- Places where strong vibrations are present.
- Dusty places such as the surface of a floor.
- Places where the unit may be exposed to water leakage, water droplet, or extremely high humidity.



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# 3 OPERATIONS (BASIC)

The following explains the various basic operations required for using this unit. Understand each section thoroughly to efficiently perform actual operations.

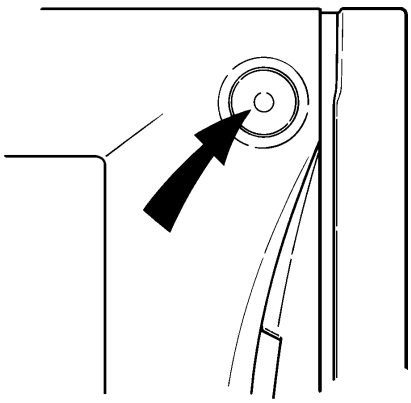
## 1 Starting Up/Ending the Unit

### Step1. Starting Up the Unit

Ensure the followings before starting up the unit.

- Cables, etc. of each device are firmly connected.
- The power switch at the back of the unit is ON.
- The floppy disk drive is not mounted with anything.

Press starting-up/ending button. Starting-up processing will be started.





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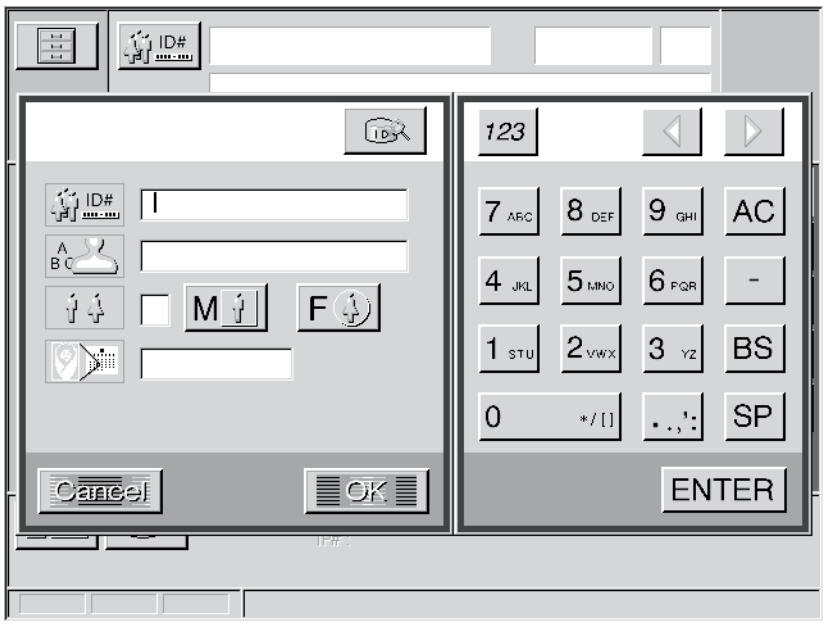
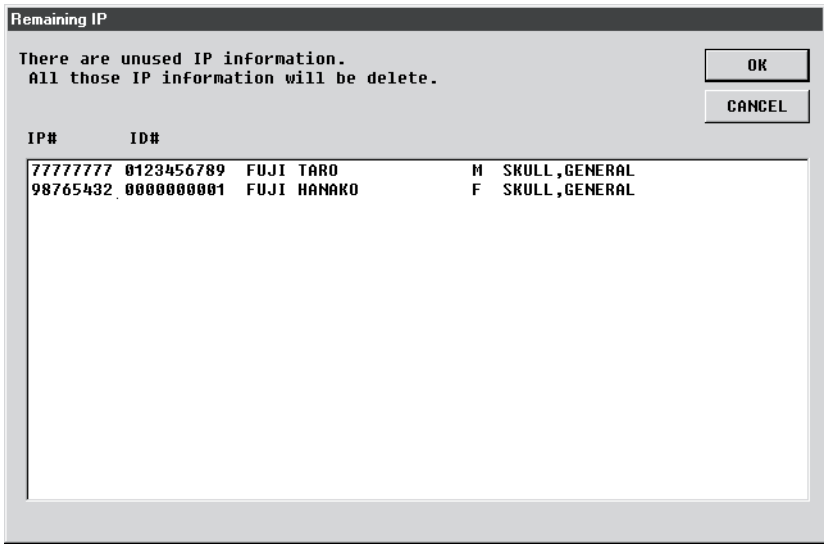
After a while, the following screen will be displayed. The starting up is completed. (Normally, starting up takes a few minutes from the start to completion.)




If there is an IP which is not read by FCR Image Reader even though its ID information was registered in the last operation, the number and information of unprocessed IP will be listed as shown below.

Press OK to delete all the information, and press CANCEL to continue the operation.

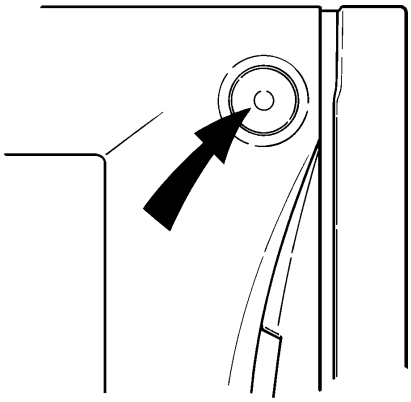



**NOTE**

- While the unit is starting and after it is started, do not operate the starting/ending button nor the power switch. If the power is turned off while the unit is running, it may cause trouble to the unit.

## Step2. Ending the Unit

Ensure that the unit is not running, and press starting/ending button. The unit will end.



**NOTE**

- Be sure to shut-down the unit with the procedure shown above. Shutting down the unit with the power switch at the back of the unit may result in malfunction. (Always leave the power switch at the back of the unit turned on.)
- It takes a while for ending processing of the unit. Do not restart (pressing starting/ending button) until the unit is completely ended (indicator is turned off).



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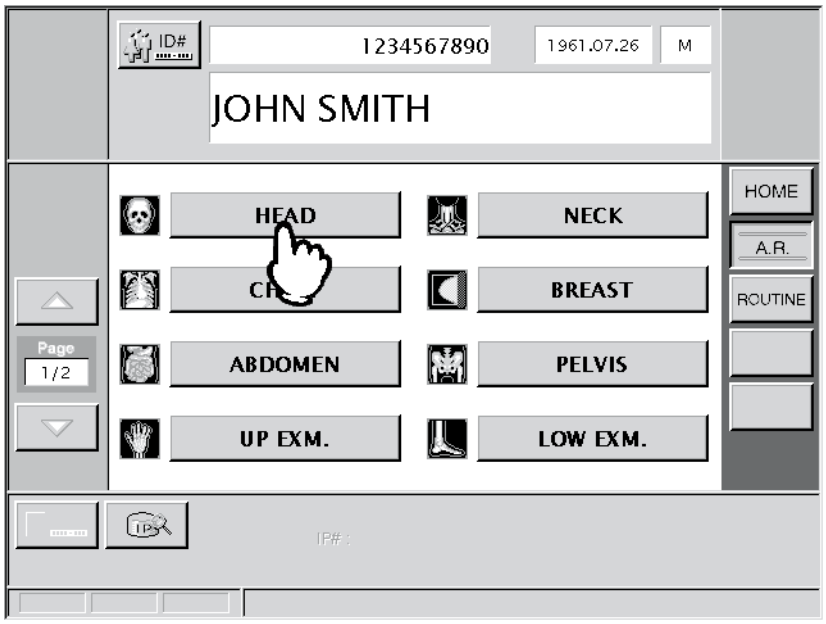
# 2 Selection Operation

Select the button on the screen (touch panel).

Press the button to select. The button is selected and the corresponding processing will be executed. When selecting a button, lightly touch a button with the tip of a finger. Pressing the button with a finger flat down or pressing the button too hard may result in the malfunction.




**NOTE**

- Buttons whose characters and icons are grayed out (displayed in a light color) cannot be selected.
- Do not place any objects on the touch panel screen. If an object is placed on the screen, it may cause malfunction and the screen may not respond for a while (10 seconds or so) even after the object is removed.

# 3 Input Operation

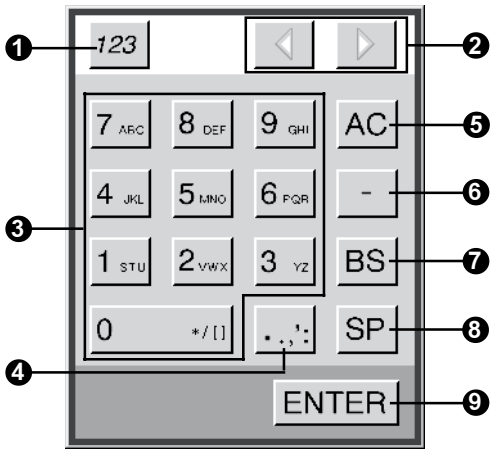
Characters (letters/number/symbols) and numerical values are input using the software keyboard displayed on the screen (touch panel).

If the unit is provided with an optional keyboard (hardware keyboard, hereafter) as an option. The hardware keyboard can be used in the same manner as the software keyboard. Refer to the following explanation. In the explanation (including other chapters), keys shown in the parentheses along with the name of the button on the software keyboard indicate the alternative keys on the hardware keyboard.

## *Step1.* Software Keyboard

Normally, the software keyboard is automatically displayed when inputting characters is required.

The following shows function of each button on the software keyboard.




### ❶ Input mode changing button

Changes input mode ( 123 : number mode, ABC : upper-case letter mode, abc : lower-case letter mode) each time this button is pressed.

### ❷ Cursor moving button

Moves cursor (described later) in the text box to left/right.

### ❸ Letter/number/symbol button

Inputs characters/numbers/symbols according to the input mode.

**Number mode** : 0 to 9

**Upper-case letter mode** : A to Z, * / [ ]

**Lower-case letter mode** : a to z, * / [ ]

When inputting successively the character assigned to the same button in the upper-case letter/lower-case letter mode, use the cursor moving button along with the letter/number/ symbol button as shown in the example below.

**Example>** High → 9 GHI 9 GHI ▷ 9 GHI 9 GHI 9 GHI ▷ 9 GHI ▷ 9 GHI 9 GHI



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### ❹ Symbol button

Inputs symbols according to the input mode.

**Number mode :** .

**Upper-case letter mode :** . , ’ :

**Lower-case letter mode :** . , ’ :

### ❺ AC button

Clears all the characters in the text box.

### ❻ - button

Inputs - (hyphen).

### ❼ BS button

Deletes the character on the left of the cursor.

### ❽ SP button

Inputs a space.

### ❾ ENTER button

Enters the input.

**NOTE**

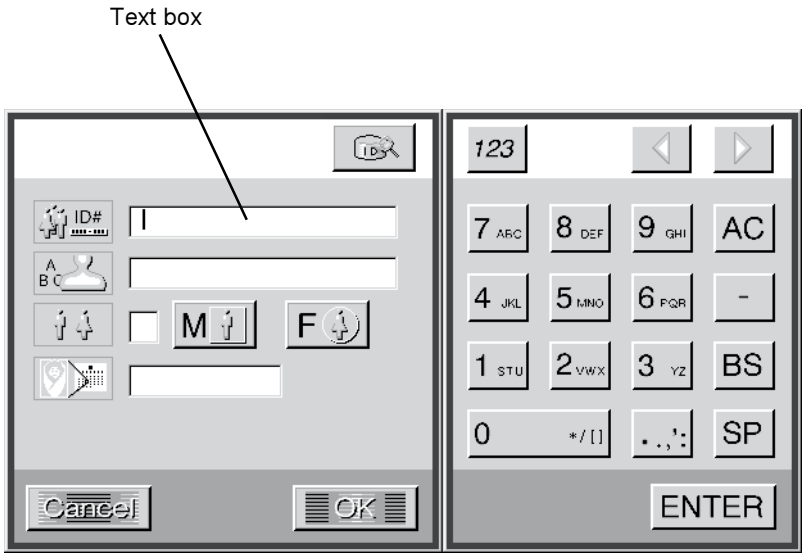
- When simultaneously using the software keyboard and the hardware keyboard, release Caps Lock of the hardware keyboard, otherwise, the input mode of the software keyboard and the input characters are reversed as shown below.

  **Upper-case letter mode :** Lower-case letters are input.

  **Lower-case letter mode :** Upper-case letters are input.

## Step2. Text Box and Cursor

The text box refers to the box to which characters are input. The cursor " | " blinking in the box indicates the point of starting input or inserting characters.




When inputting/deleting characters, move the cursor to the desired point as shown below.

**Moving the cursor between the text boxes:**
Press the desired text box or press ENTER ( Tab / Enter key). The cursor will move between the text boxes.

**Moving the cursor in the character string:**
Press ◁ / ▷ ( ← / → key). The cursor will move in the character string.



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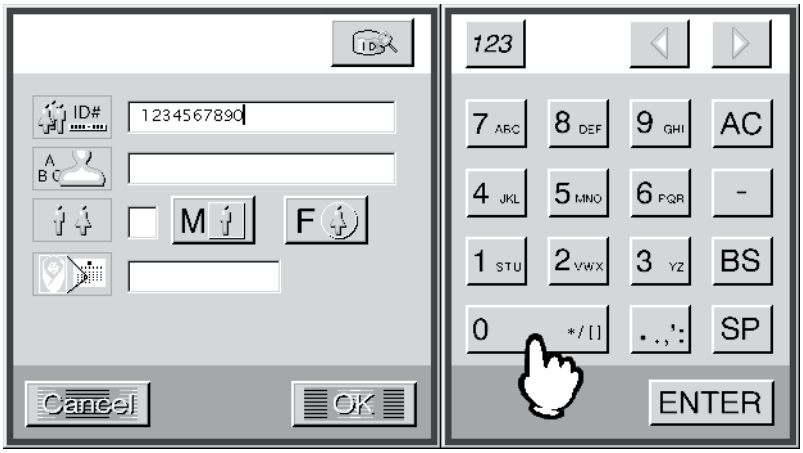
# Step3. Inputting/Deleting Characters

## ■ Inputting

Move the cursor to the desired point, and input the appropriate character. The character will be input (insert) on the left of the cursor. Exercise care that inputting inappropriate characters are regarded as invalid (e.g., inputting letters in the numerical value input box).

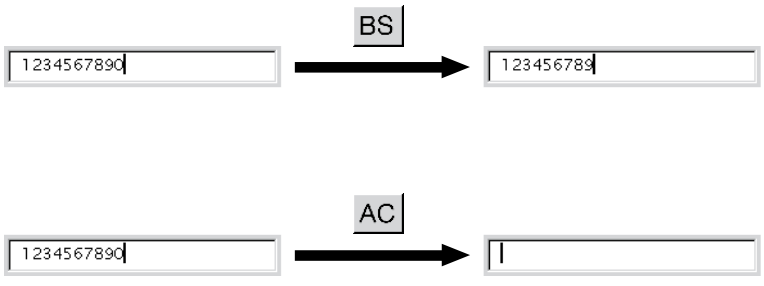



**NOTE**

- * and @ are invalid characters. Do not input these characters when using the hardware keyboard.

## ■ Deleting

Move the cursor to the desired point, and press BS ( Back Space key) or AC. When BS is pressed, the character on the left of the cursor will be deleted. When AC is pressed, all the characters will be deleted.




When using the hardware keyboard, the character on the right of the cursor will be deleted when Delete is pressed.

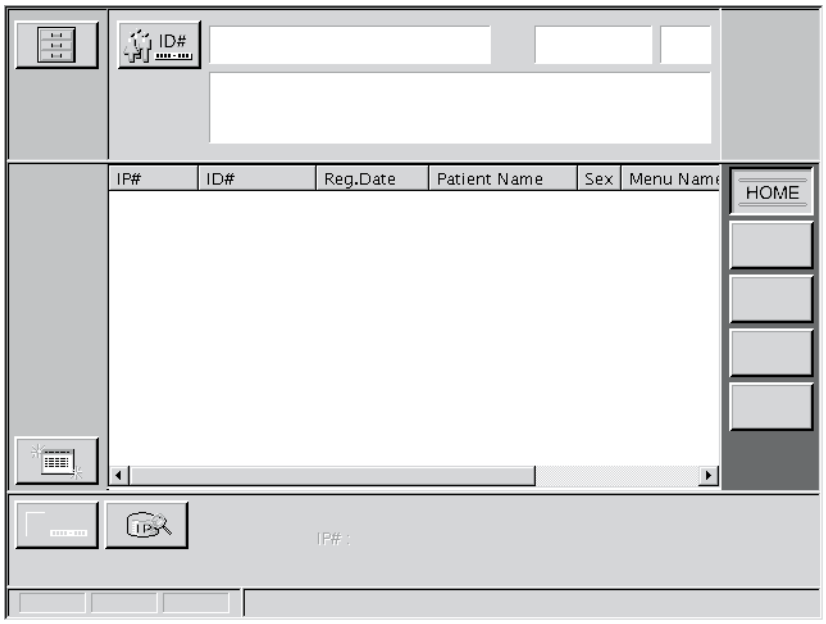
# 4 Operation Screen

The routine processing mode of this unit has four types of operation screens for basic operations.

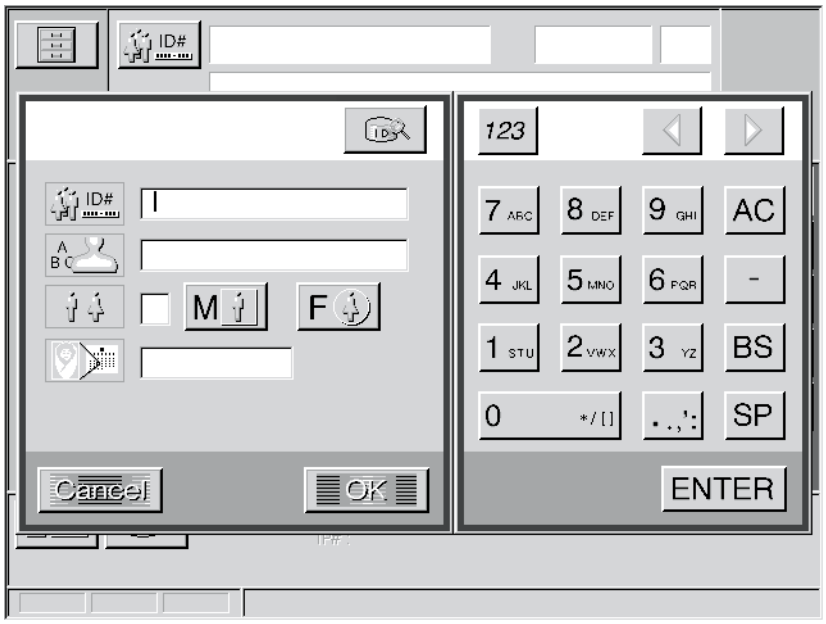
## ■ Patient Information Input (HOME) Screen

The screen to input the patient information. It is displayed when the unit is started and is the starting point of the processings.

On this screen, the information of IP in the FCR Image Reader waiting to be processed is displayed in a list. However, the displayed information will not automatically be updated. To update the display, press .




Normally, the patient information input box and the software keyboard are opened as shown below when the Patient Information Input (HOME) Screen is displayed.



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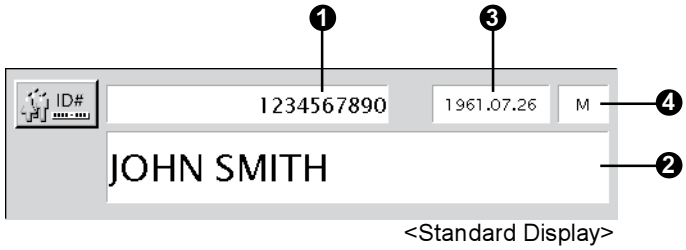
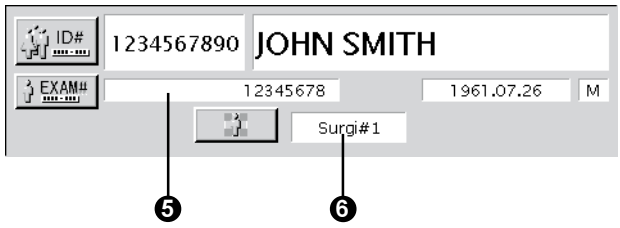
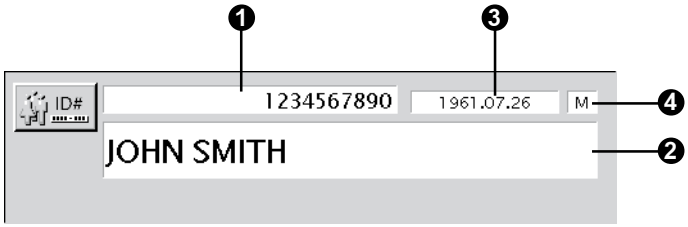
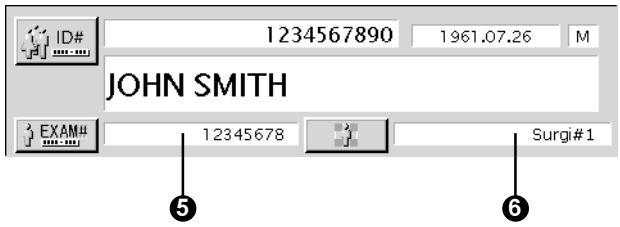
The following shows the patterns of columns to display patient's information. These vary depending on the setting made when the unit is installed.



<Standard Display>




**❶ Patient ID number**
**❷ Patient name**
**❸ Date of birth of patient**
**❹ Sex of patient**
**❺ Examination number**
**❻ Department name**

## ■ Anatomical Region Selection (A.R.) Screen

The screen to select the anatomical region of images. It is displayed after the patient information is input.

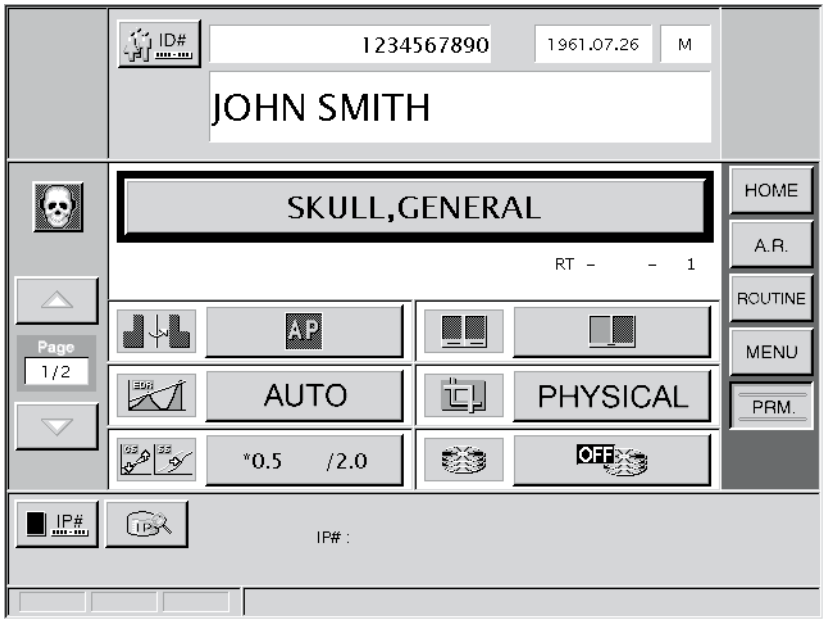
## ■ Exposure Menu Selection (MENU) Screen

The screen to select the exposure menu of images. It is displayed after the anatomical region is selected.

## ■ IP Number Registration (PRM.) Screen

The screen to register the IP number. It is displayed after the exposure menu is selected.

Various parameters for image processings can also be made on this screen.




### *– Screen display of when Image Readers of different types are simultaneously used –*

When Image Readers of cassette type and built-in type are simultaneously used, the buttons shown below are displayed at the bottom of each screen. Operate these buttons according to necessity. (For details of operations of the built-in type unit, refer to the dedicated Operation Manual.)

**❶ IP unloading button**

When taking an exposure setting a cassette in front of the exposure part of the built-in type unit, pressing this button unloads IP in the built-in type unit.

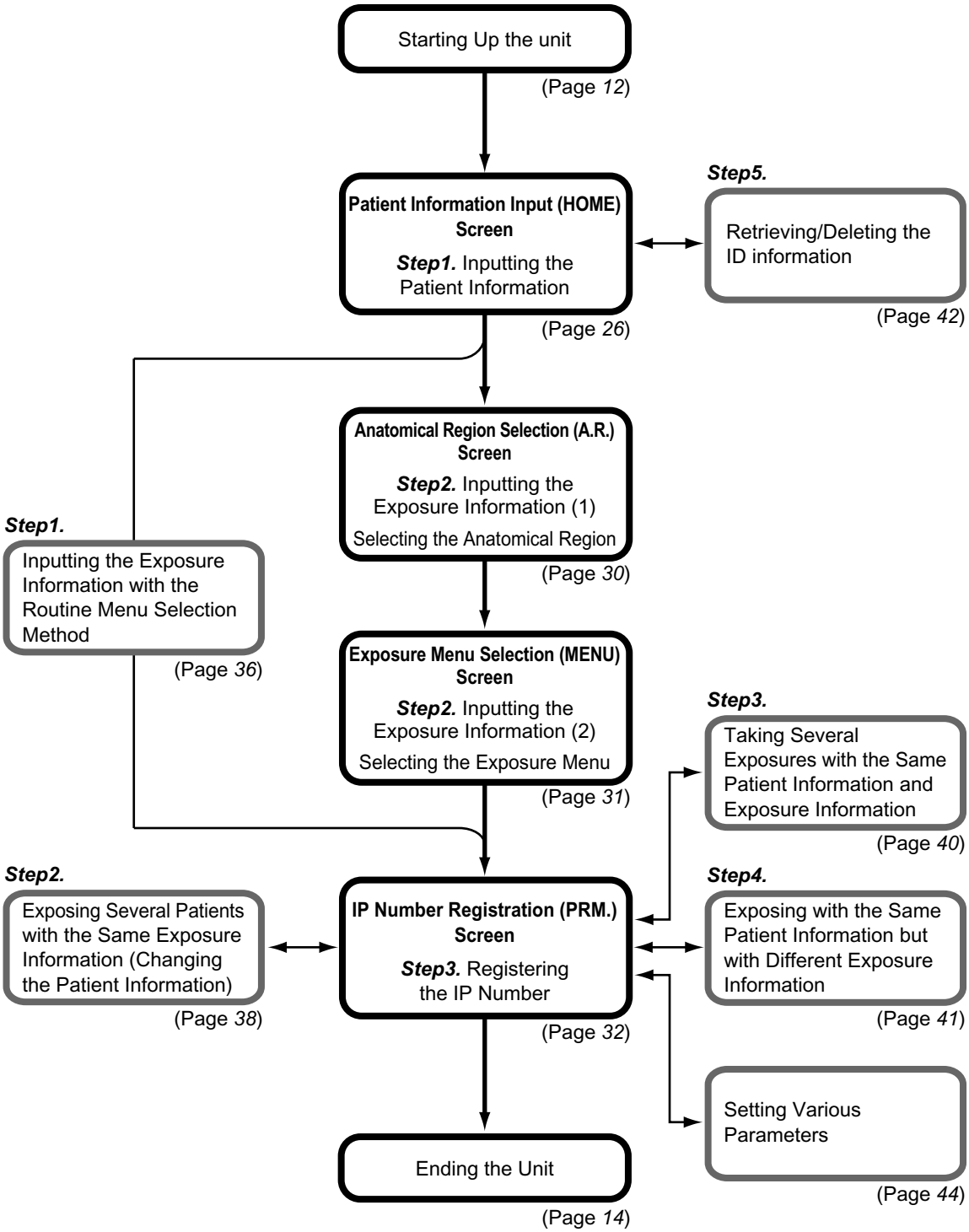
**❷ Selector button**

Pressing this button switches between the operation screens for the cassette-type unit and those for the built-in type unit.

When any errors occur in the built-in type unit, the corresponding button blinks and the alarm goes off. In that case, press the button that is blinking to switch the screen, and then take appropriate steps according to the type of the error.

# 5 Operation Flow Chart

The operation flow chart is shown below. For the details of the operation, refer to the pages shown in the parentheses.



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# 4 OPERATIONS (PROCESSING)

## 1 Basic Operation

The following explains the basic operations to input ID information of images. Perform the operations from ***Step1.*** to ***Step3.*** in order.

### *Step1.* Inputting the Patient Information

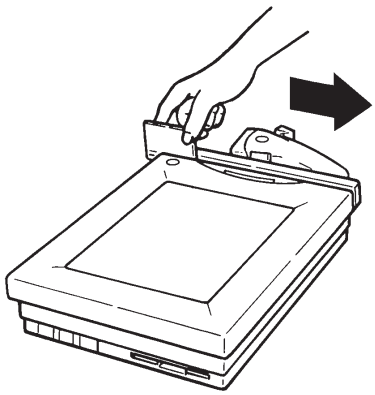
Input the patient information.

Perform the following operations according to the input method.

#### ■ Input Using the ID Card

Input the patient information using the ID card (CR card) prepared for each patient in advance.

Insert the ID card into the card reader slot and slide it towards you.



When the patient information contained in the ID card is read, the information will be displayed on the screen for a certain period of time, and the input will be completed. The Anatomical Region Selection (A.R.) Screen will be displayed.

If the patient information is incorrectly input, perform the same operation at the Anatomical Region Selection (A.R.) Screen. The patient information will be changed.

It is also possible to input any information items that cannot be input only with from the ID card. Refer to “Input Using the Software Keyboard Input”.



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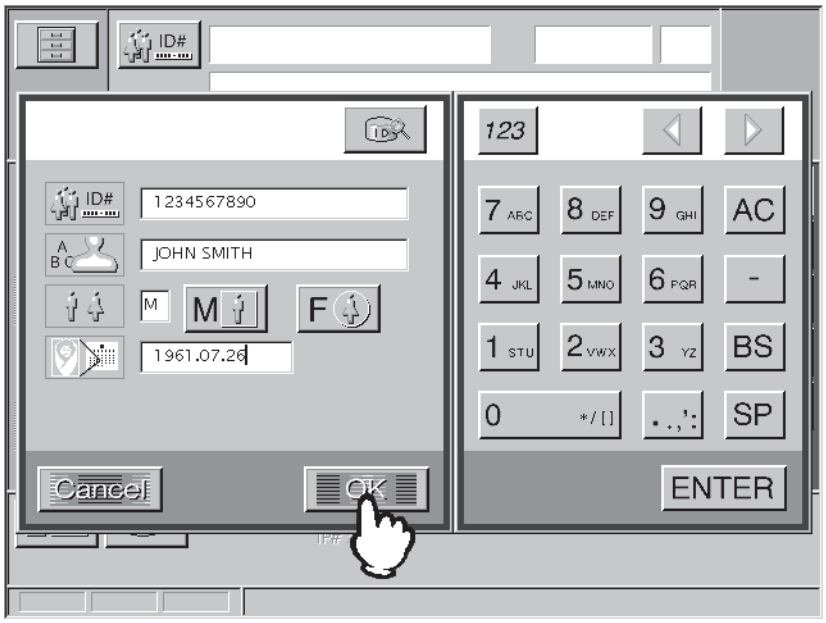
## Input Using the Software Keyboard

Input the patient information using the software keyboard (hardware keyboard).

The patient information input box and the software keyboard is displayed immediately after the starting up the unit or when moving from a different screen to the Patient Information Input (HOME) Screen.

Input each item, and press OK ( F5 key). Not all the items should necessarily be input to go to the next operation. The patient ID number, however, must always be input.




ID# : Inputs the patient ID number.

A B C : Inputs the patient name.

: Inputs the sex of the patient (Male: M, Female: F). M / F can also be used for input.

: Inputs the date of birth of the patient.
The format of inputting the date differs depending on the setting at time of installation of the unit.

Cancel : Cancels the operation.

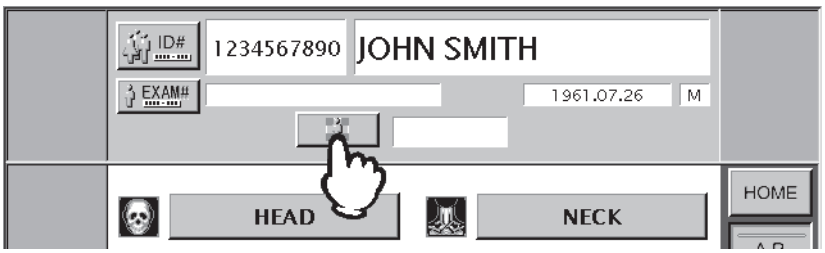
When the input of the patient information is completed. The Anatomical Region Selection (A.R.) Screen will be displayed.

If the patient information is incorrectly input, press ID# ( F1 key) at the Anatomical Region Selection (A.R.) Screen to display the patient information input box and the software keyboard, and perform the same operation. The patient information will be changed (refer to page *38*).

### –Inputting the department name/examination number–

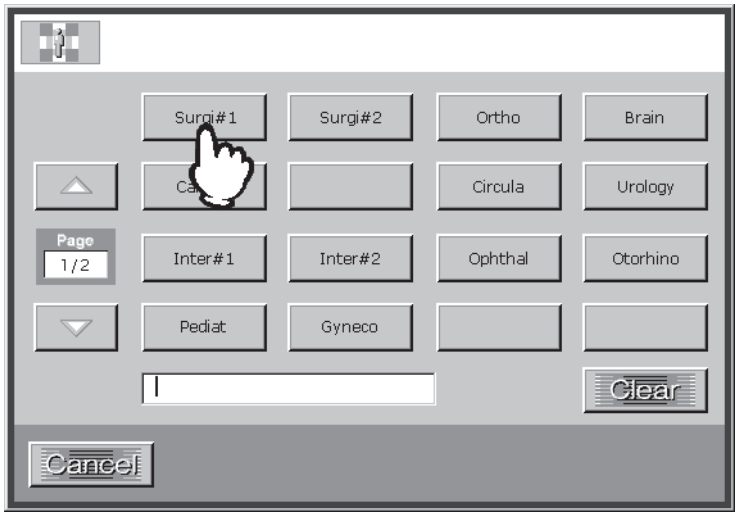
If the department name and the examination number are set, the information of those items can be input on the Anatomical Region Selection (A.R.) Screen and other screens. If these items are, however, set for the display purpose only (buttons are grayed out), information cannot be inputted.

**Department name:**
Press [ ].




The department name setting box will be displayed.

Press a department name button. The department name will be set, and the box will be closed.




Clear **:** Clears the current setting and goes back to the previous screen.
/ **:** Turns the page.
Cancel **:** Cancels the operation.

The department name currently set is shown in the text box. Any characters can be input in the text box using the hardware keyboard. Input characters, and press Enter key.



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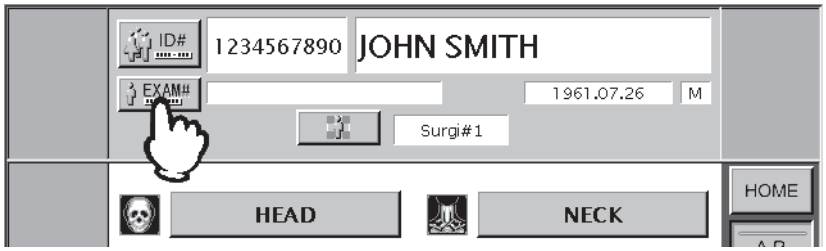
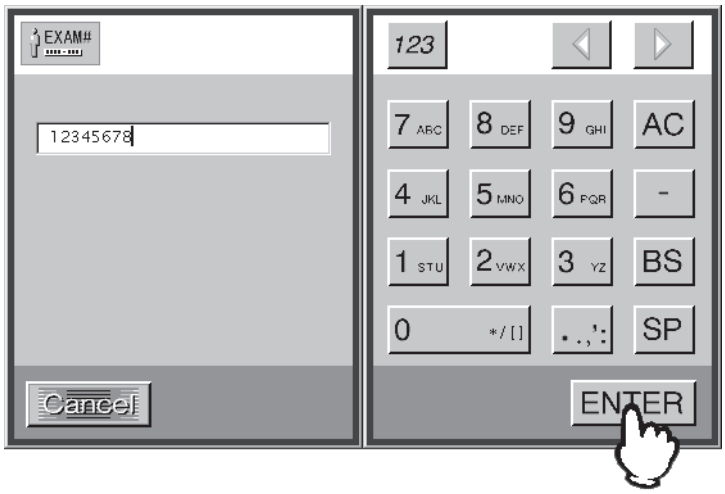
**Examination number :**

Press EXAM#.




The examination number input box and the software keyboard will be displayed.

Input the examination number, and press ENTER ( Enter key). The examination number will be set, and the box and the software keyboard will be closed.




Cancel **:** Cancels the operation.

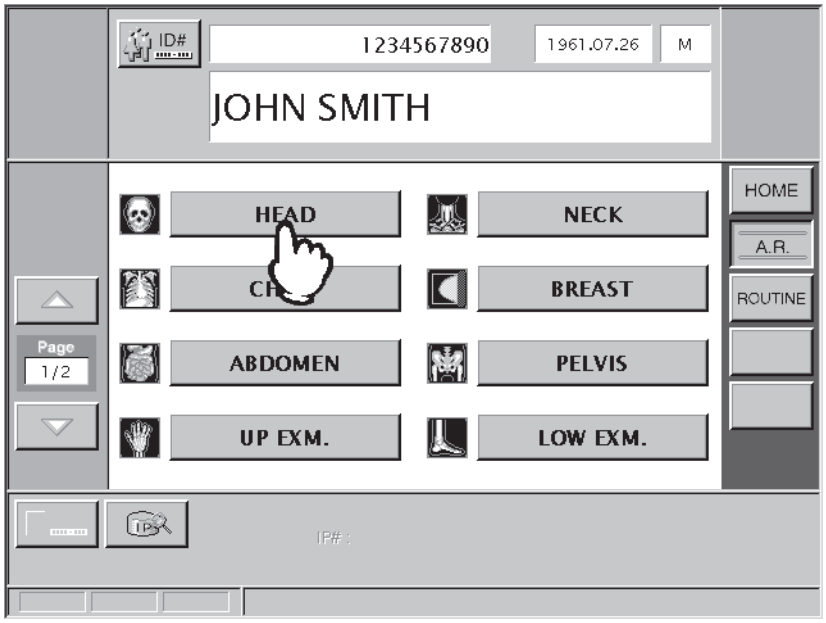
## Step2. Inputting the Exposure Information

Input the exposure information.

In addition to the procedure explained here, the routine menu selection method can be used to input the exposure conditions. Refer to page 36.

First, select the anatomical region.

Press an anatomical region button on the Anatomical Region Selection (A.R.) Screen.




HOME : Goes back to the Patient Information Input (HOME) Screen.

ROUTINE : Moves to the Routine Menu Selection (ROUTINE) Screen (page 36).

: Retrieves/deletes the ID information (page 42).

/ : Turns page.

When the anatomical region is selected, the Exposure Menu Selection (MENU) Screen will be displayed.



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Next, select the exposure menu.

Press an exposure menu button on the Exposure Menu Selection (MENU) Screen.

HOME : Goes back to the Patient Information Input (HOME) Screen.

A.R. : Goes back to the Anatomical Region Selection (A.R.) Screen.

ROUTINE : Moves to the Routine Menu Selection (ROUTINE) Screen (page *36*).

**(Anatomical region icon)** : Goes back to the Anatomical Region Selection (A.R.) Screen.

: Retrieves/deletes the ID information (page *42*).

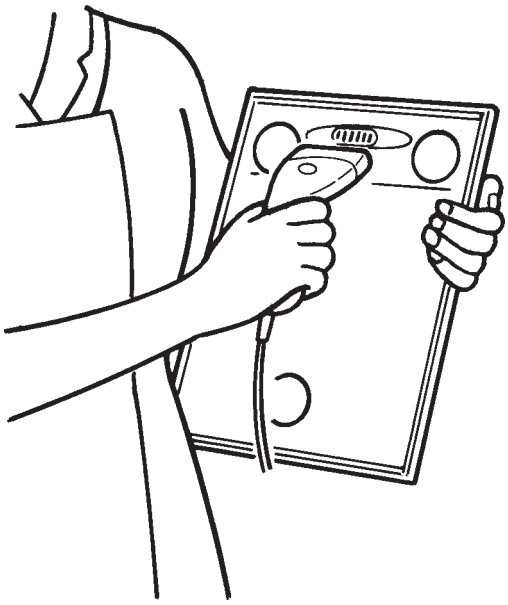
/ : Turns page.

When the exposure menu is selected, the IP Number Registration (PRM.) Screen will be displayed.

## Step3. Registering the IP Number

Register the IP number.

Place the sensor of the bar-code reader on the bar-code label of the exposed IP.





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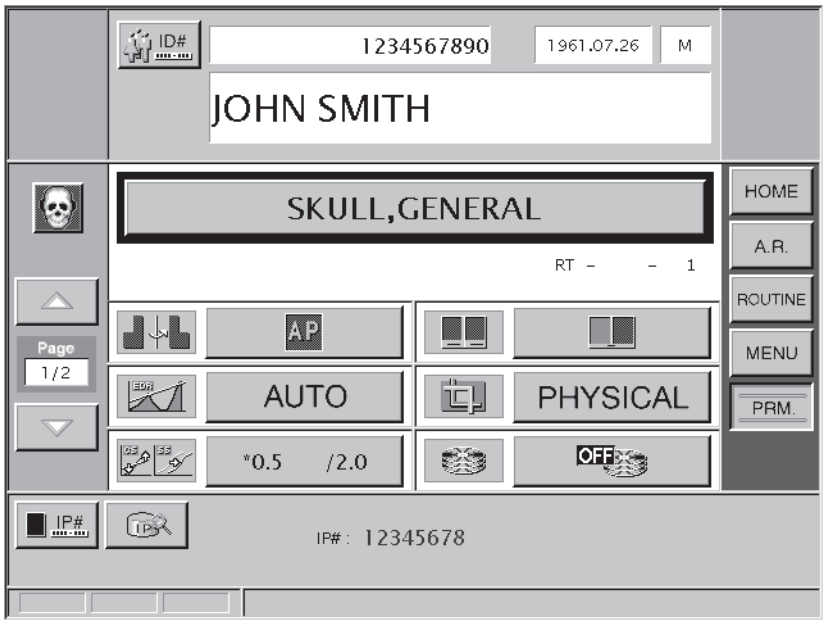
When a blip sounds, the reading is completed and the IP number is registered. The registered IP number will be displayed at the bottom of the screen for the certain period of time.




HOME : Goes back to the Patient Information Input (HOME) Screen.

A.R. : Goes back to the Anatomical Region Selection (A.R.) Screen (the same as pressing the anatomical region icon button).

ROUTINE : Moves to the Routine Menu Selection (ROUTINE) Screen (page *36*).

MENU : Goes back to the Exposure Menu Selection (MENU) Screen (the same as pressing the exposure menu name button).

IP# : Registers the IP number using the software keyboard (page *34*).

: Retrieves/deletes the ID information (page *42*).

/ : Turns page.

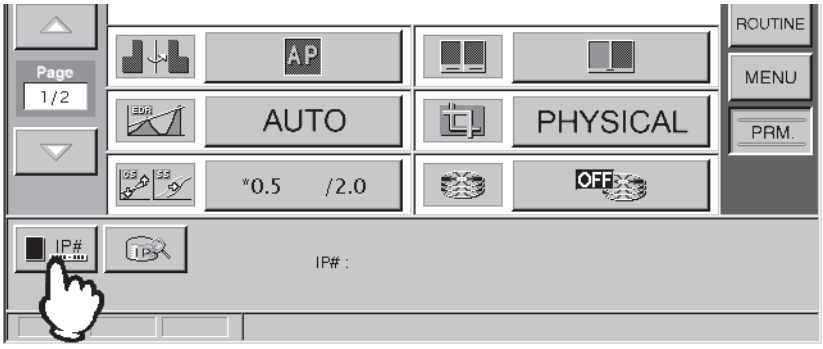
As soon as the registration of the IP number is completed, the unit waits for the next IP number registration.

When newly inputting the ID information, press HOME to return to the Patient Information Input (HOME) Screen, and repeat the operation from ***Step1.***.

### –Registering the IP number using the software keyboard–

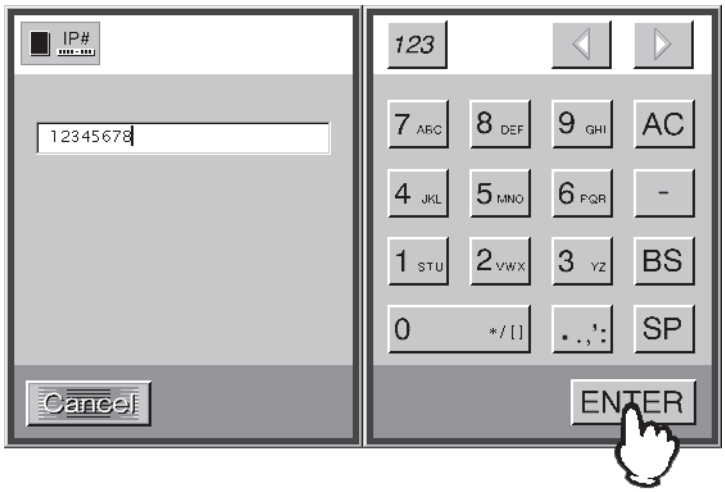
The IP number can be registered using the software keyboard (hardware keyboard). Use this function if the IP number cannot be read with the bar-code reader for some reason.

Press IP#.




The IP number input box and the software keyboard will be displayed.

Input the IP number (8-digit number) shown on the bar-code label, and press ENTER ( Enter key). The IP number is registered, and the box and the software keyboard will be closed.




Cancel **:** Cancels the operation.



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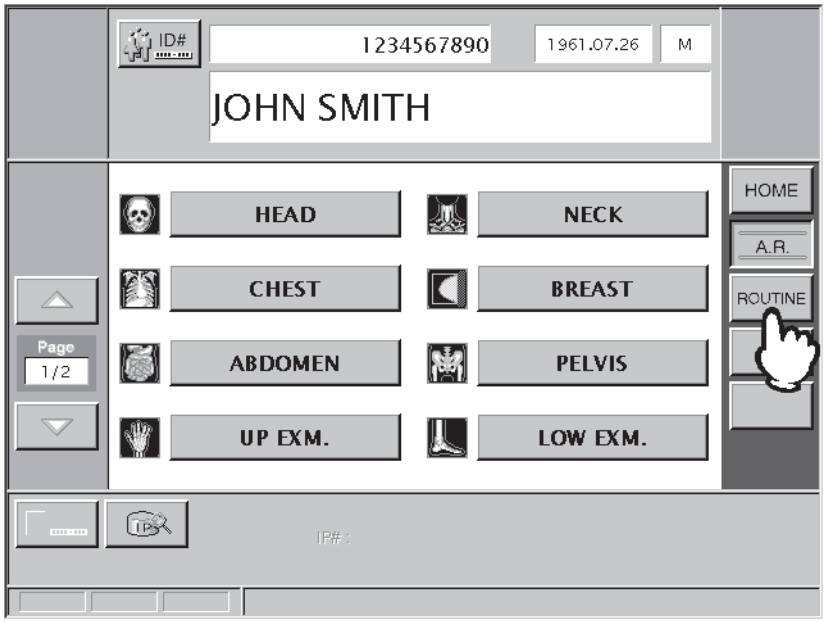
# 2 Applied Operations

## Step1. Inputting the Exposure Information with the Routine Menu Selection Method

The routine menu selection method is a method that collectively registers the exposure menus frequently used from which an exposure menu is selected. This method skips the selection of the anatomical region and simplifies the input of the exposure information. (The registration of the routine menu is performed in the service mode. Refer to the separate manual.)

Press ROUTINE on the Anatomical Region Selection (A.R.) Screen after inputting the patient information.



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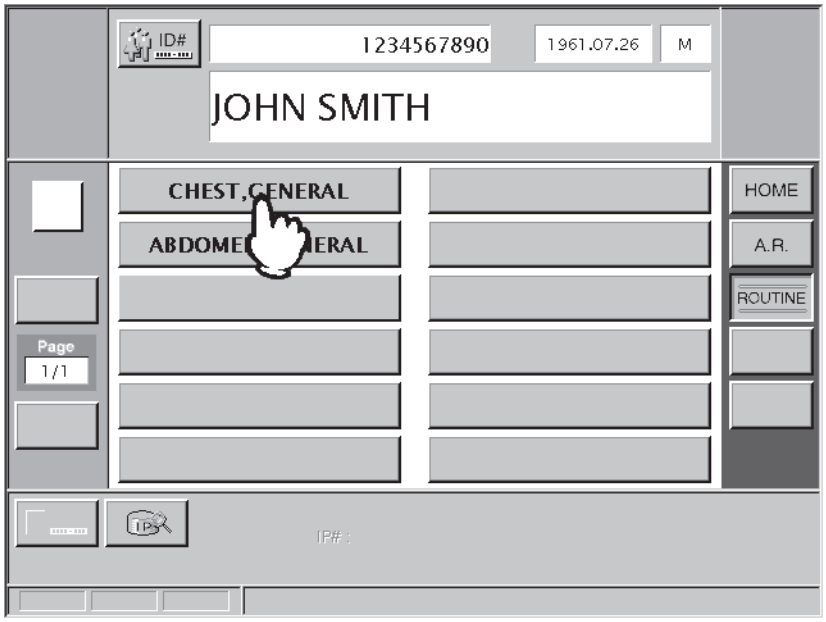
The Routine Menu Selection (ROUTINE) Screen will be displaced.

Press an exposure menu button.




HOME : Goes back to the Patient Information Input (HOME) Screen.

A.R. : Moves to the Anatomical Region Selection (A.R.) Screen.

: Moves to the Anatomical Region Selection (A.R.) Screen.

: Retrieves/deletes the ID information (page *42*).

/ : Turns page.

When the exposure menu is selected, the IP Number Registration (PRM.) Screen will be displayed.

The selection mode of the exposure menu is set to the routine menu selection method by selecting an exposure menu from the Routine Menu Selection (ROUTINE) Screen. From the next operation onwards, the Routine Menu Selection (ROUTINE) Screen will be displayed after the patient information is input. Perform the same operation.

To cancel the routine menu selection method, perform the operation in the same manner as the basic operations after displaying the Anatomical Region Selection (A.R.) Screen.

The Routine Menu Selection (ROUTINE) Screen can be displayed from the Exposure Menu Selection (MENU) Screen/IP Number Registration (PRM.) Screen as well. Press ROUTINE on either screen.

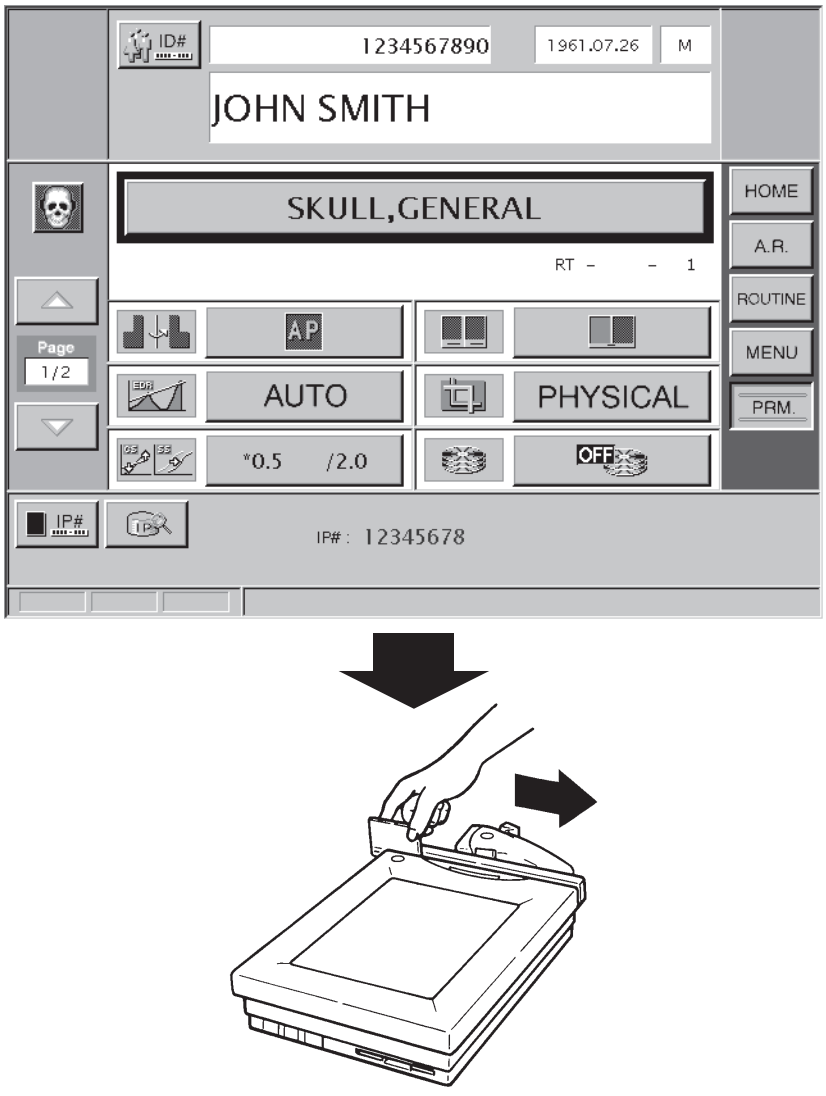
## Step2. Exposing Several Patients with the Same Exposure Information (Changing the Patient Information)

For example, as in an X-ray room for exposing the chest, several patients may be exposed using the same exposure information. In this case, from the second patient and onwards, the exposure information need not be input and operations can be performed simply by inputting the patient information and IP number.

Perform the following operations according to the input method of patient information.

### ■ Input Using the ID Card

At the IP Number Registration (PRM.) Screen after the completion of the operation of the first patient (inputting the exposure information → registering IP number), insert the ID card into the card reader slot. The patient information will be changed, and the information will be displayed on the screen for a certain period of time. Register the IP number.




Repeat the same operation from the third patient onwards

The patient information can be changed at the Anatomical Region Selection (A.R.) Screen/ Exposure Menu Selection (MENU) Screen/Routine Menu Selection (ROUTINE) Screen as well. Perform the operation as necessary.



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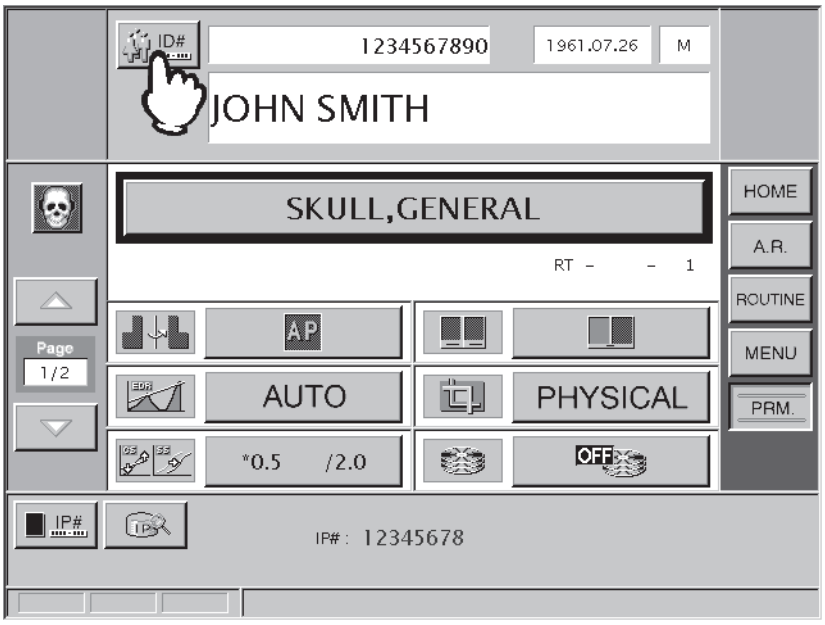
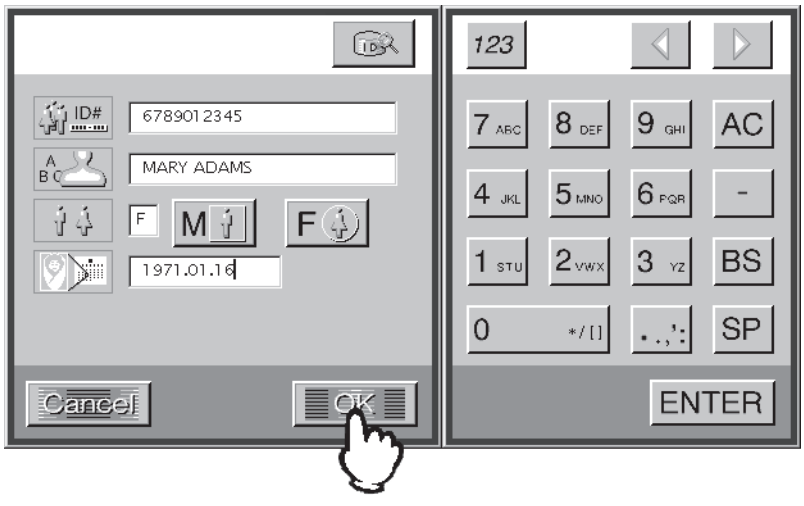
## Input Using the Software Keyboard

At the IP Number Registration (PRM.) Screen after the completion of the operation of the first patient (inputting the exposure information → registering the IP number), press ID# ( F1 key).




The patient information input box and the software keyboard will be displayed. Input each item, and press OK ( F5 key). The patient information will be changed. Register the IP number.




Cancel : Cancels the operation

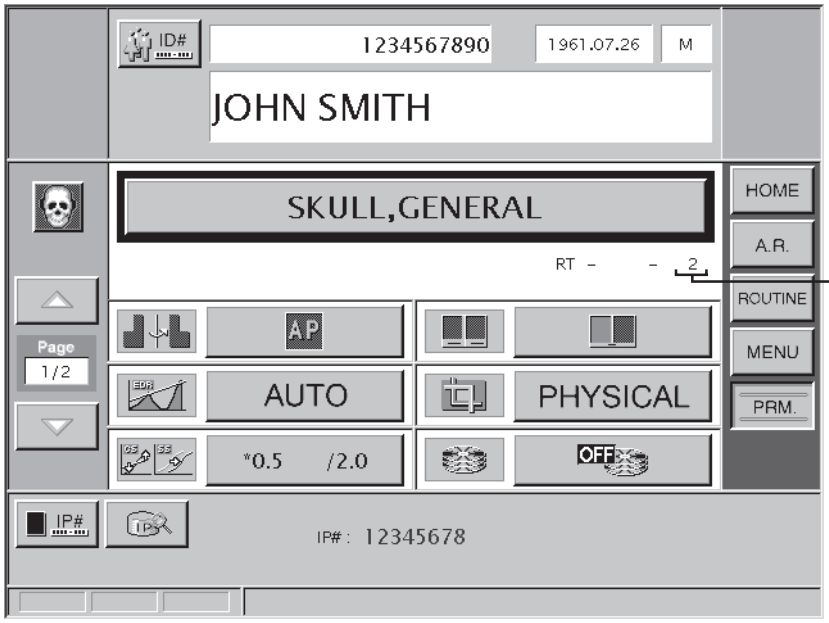
Repeat the same operation from the third patient onwards.

The patient information can be changed at the Anatomical Region Selection (A.R.) Screen/ Exposure Menu Selection (MENU) Screen/Routine Menu Selection (ROUTINE) Screen as well. Perform the operation as necessary.

## Step3. Taking Several Exposures with the Same Patient Information and Exposure Information

When taking several exposures of the same patient with the same exposure information, the operation can be performed simply by registering the IP number, skipping the input of the patient information and the exposure information for the second exposure and onwards.

At the IP Number Registration (PRM.) Screen after the completion of the operation of the first exposure (inputting the exposure information → registering the IP number), repeat the registration operation of the IP number. When the IP number is registered, the number of exposures will be displayed on the screen.




Repeat the same operation from the third exposure and onwards.



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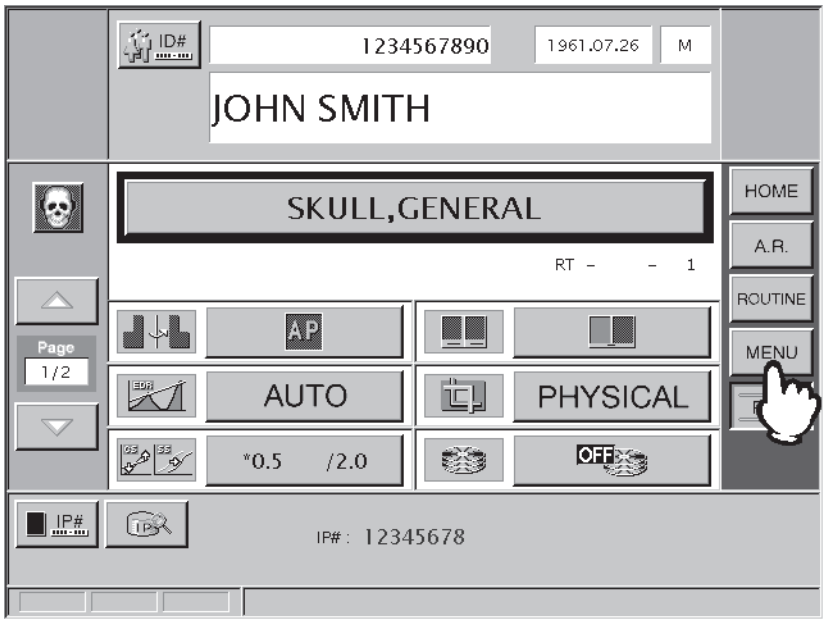
## Step4. Exposing with the Same Patient Information but with Different Exposure Information

When taking several exposures of the same patient with the exposure information changed, the operation can be performed simply by inputting the exposure information and registering the IP number, skipping the input of the patient information for the second exposure and onwards.

At the IP Number Registration (PRM.) Screen after the completion of the operation of the first exposure (inputting the exposure information → registering IP number), press one of A.R. (Anatomical Region Selection Screen) / ROUTINE (Routine Menu Selection Screen) / MENU (Exposure Menu Selection Screen), and input the exposure information according to the screen to be displayed for inputting the exposure information.



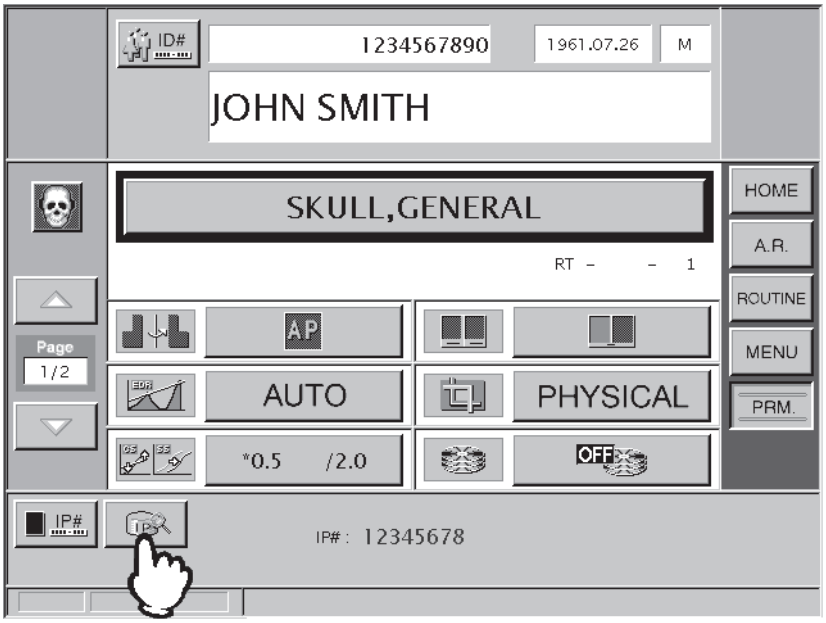

When the input of the exposure information is completed, the IP Number Registration (PRM.) Screen will be displayed again. Register the IP number.

Repeat the same operation from the third exposure and onwards.

## Step5. Retrieving/Deleting the ID information

The ID information of the image can be retrieved (confirmed)/deleted using the IP number of the image as the keyword. Delete can be used when the IP is incorrectly registered, etc.

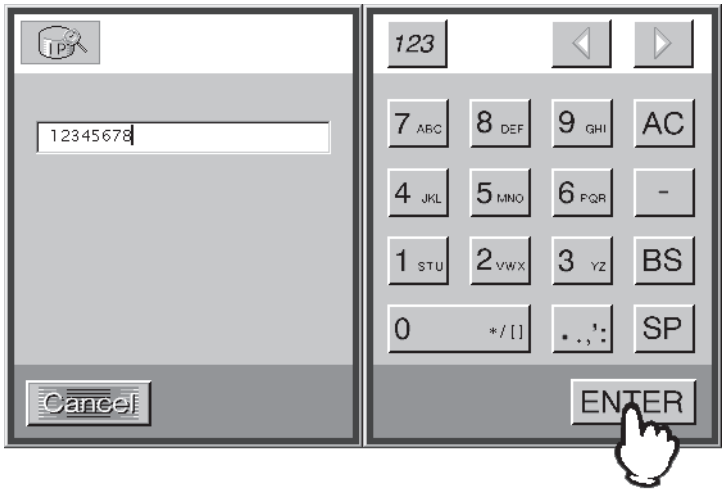
Press IP# on any screen.




The retrieval box and software keyboard will be displayed.

Normally, read the desired IP number using the bar-code reader. The retrieval will be started.

If the IP number cannot be read with the bar-code reader for some reason, input the IP number (8-digit number), and press ENTER ( Enter key). The retrieval will be started.




Cancel : Cancels the operation.



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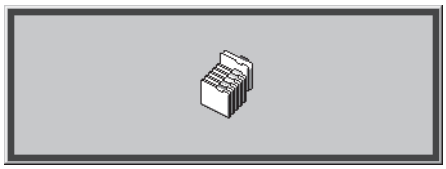
The following box will be displayed during retrieval.

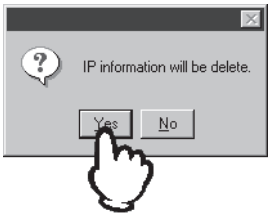


When the retrieval is completed, the ID information display box will be displayed.

Press Close to close the box as is, or press to delete the ID information.

When is pressed, a confirming alert box will be displayed.

Press Yes , and the ID information will be deleted.



# 3 Setting Various Parameters

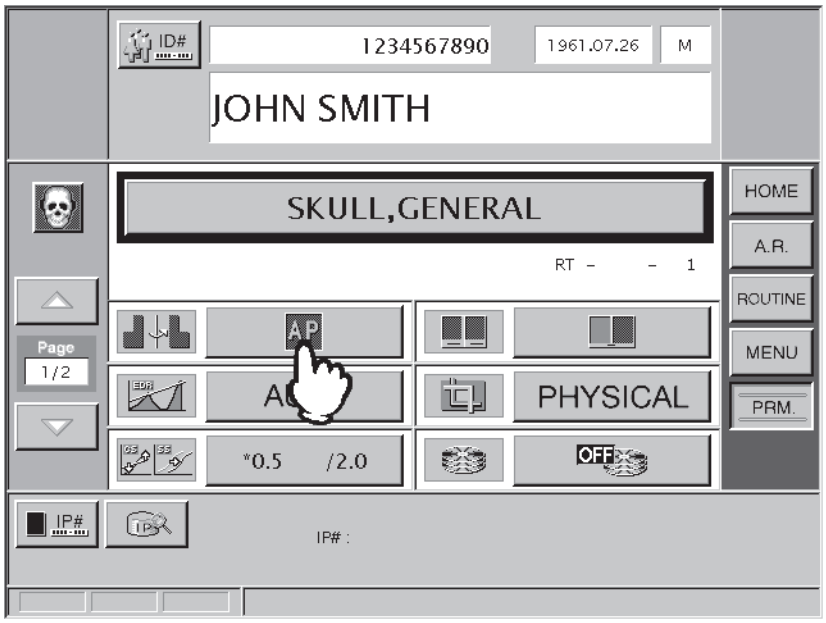
Sets the various parameters displayed at the IP Number Registration (PRM.) Screen.

These parameters are set with the appropriate condition for each exposure menu in advance. Perform the operation as necessary.

## Step1. Image Inversion

Set the inversion display of image.

Press the menu button.



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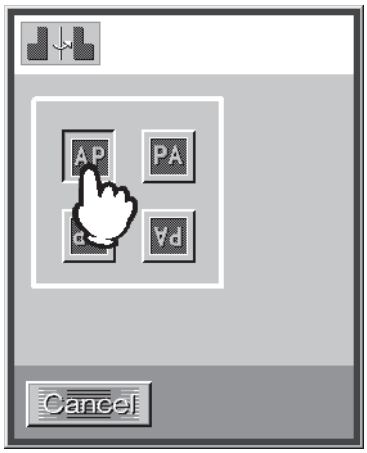
The image inversion setting box will be displayed.

Press one of the buttons. The display style of the image will be set, and the box will be closed.

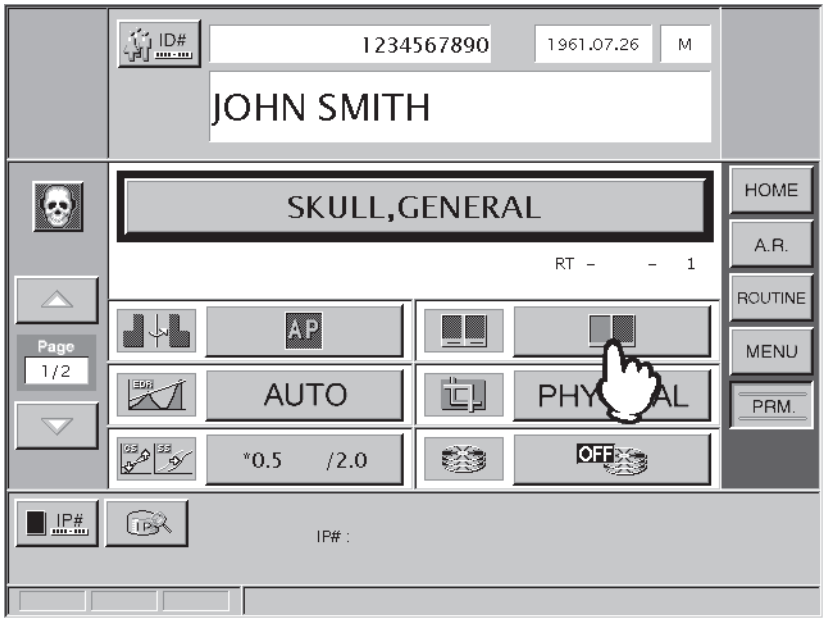



: Normal position.
: Top/bottom inverse.
: Right/left inverse.
: Top/bottom/right/left inverse.
: Cancels the operation.

## Step2. Film Output Format

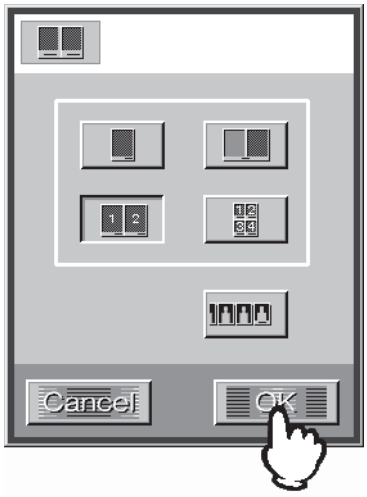
Sets the film output format of the image.

Press the menu button.




The film output format setting box will be displayed.

Press one of the buttons, and press OK. The film output format of the image will be set, and the box will be closed.




: 1-image format.
: 2-image format.
: 2-in-1 format.
: 4-in-1 format.
: Specifies the final image in the same group when 2-in-1/4-in-1 is used.
Cancel : Cancels the operation.



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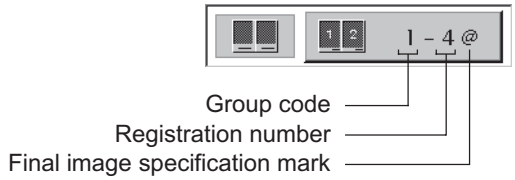
2-in-1/4-in-1 format is the format to output two or four different images of the same patient onto one film.

When 2-in-1/4-in-1 format is set, the status is displayed in the menu button as shown below.




**Group code** : The group code of the image set in 2-in-1/4-in-1 format. Counted each time the registration number is reset.

**Registration number** : Each time the IP is counted, the image is assigned to a film in the order that the IP is counted.
Up to sixteen registration numbers are available in the same group. When the seventeenth IP is registered, the registration number is reset to "1". It is reset also when the IP of the final image is registered or when the patient information is changed on the IP Number Registration (PRM.) Screen.

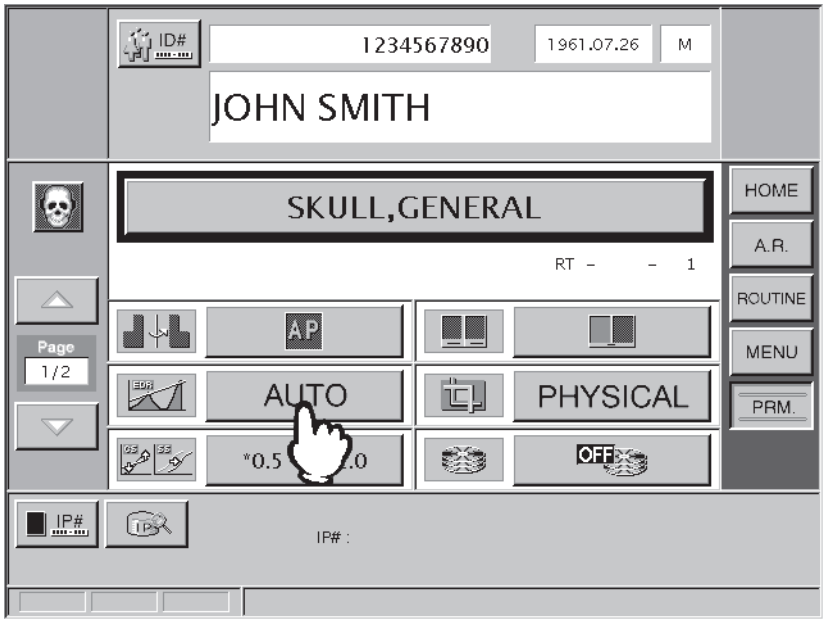
**Final image specification mark** : When is pressed, @ is displayed, which indicates that the image to be registered next is specified as the final image in the same group.

If the exposure menu is changed after registering the IP of the final image or changing the patient information on a screen other than IP Number Registration (PRM.) Screen, 2-in-1/4-in-1 format will automatically be canceled. If the exposure menu is changed before registering the IP of the final image, however, 2-in-1/4-in1 format will be continued.

## Step3. EDR mode

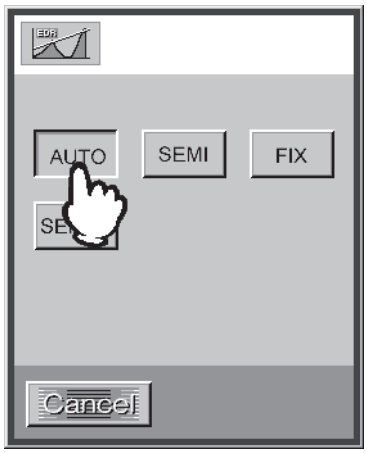
Sets the EDR mode of the image (image reading sensitivity setting method).

Press the menu button.




The EDR mode setting box will be displayed.

Press one of the buttons.




AUTO : AUTO mode.
SEMI : SEMI-AUTO mode.
FIX : FIX mode.
SEMI-X : SEMI-X mode.
Cancel : Cancels the operation.

When either AUTO mode or SEMI-AUTO mode is set, the box will be closed.

When either FIX mode or SEMI-X mode is set, perform the following operations.



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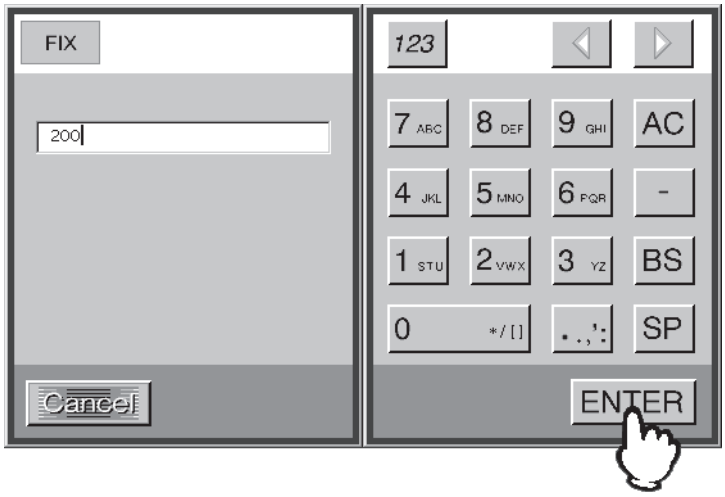
**FIX mode :**

When FIX is pressed, the S-value input box and the software keyboard will be displayed.

Input the S-value (the value of reading sensitivity: 2 to 20000), and press ENTER ( Enter key). The S-value will be set, and the box and the software keyboard will be closed.

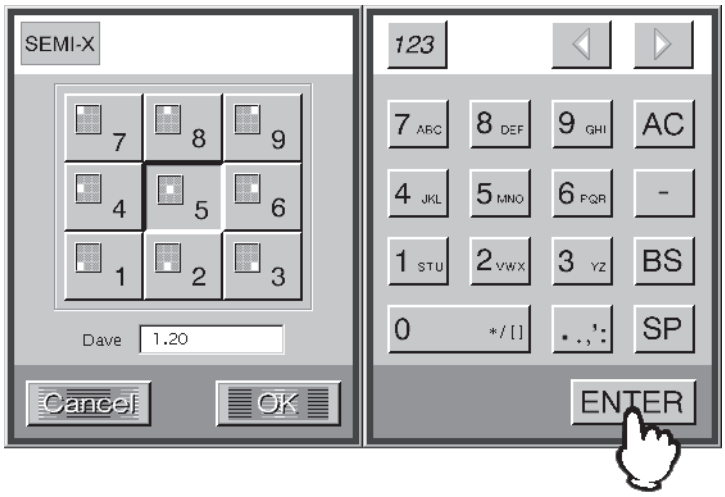



Cancel **:** Cancels the operation.

**SEMI-X mode :**

When SEMI-X is pressed, the SEMI-X mode setting box and the software keyboard will be displayed.

Press a photometric position button, input the output average density (Dave: 0.30 to 2.64), and press OK ( F5 key). The photometric position and the output average density are set, and the box and the software keyboard will be closed.

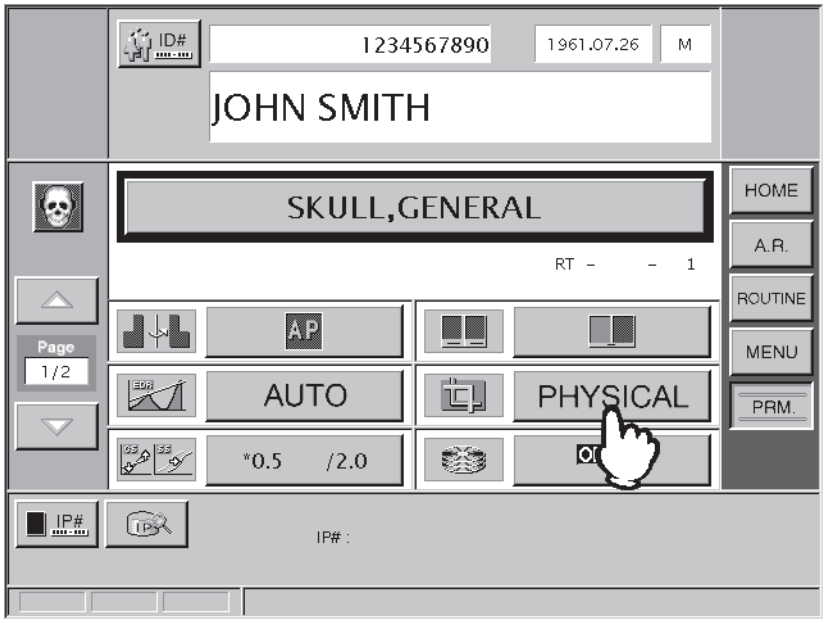



Cancel **:** Cancels the operation.

## Step4. IP Reading Size

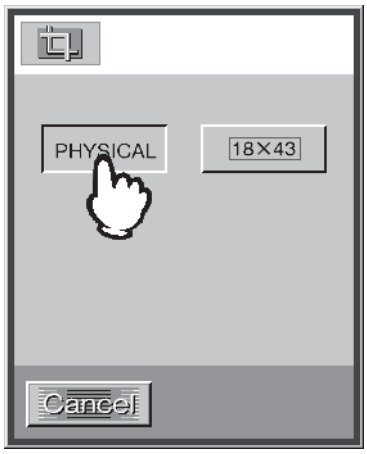
Sets the Reading Size of the IP.

Press the menu button.




The IP reading size setting box will be displayed.

Press either button. The IP reading size is set, and the box will be closed.




PHYSICAL : Physical size.

18×43 : 18 x 43 cm logical size.
Mode to read the IP with size of 35 (W) x 43 (H) cm in range of 18 (W) x 43 (H) cm from the center.



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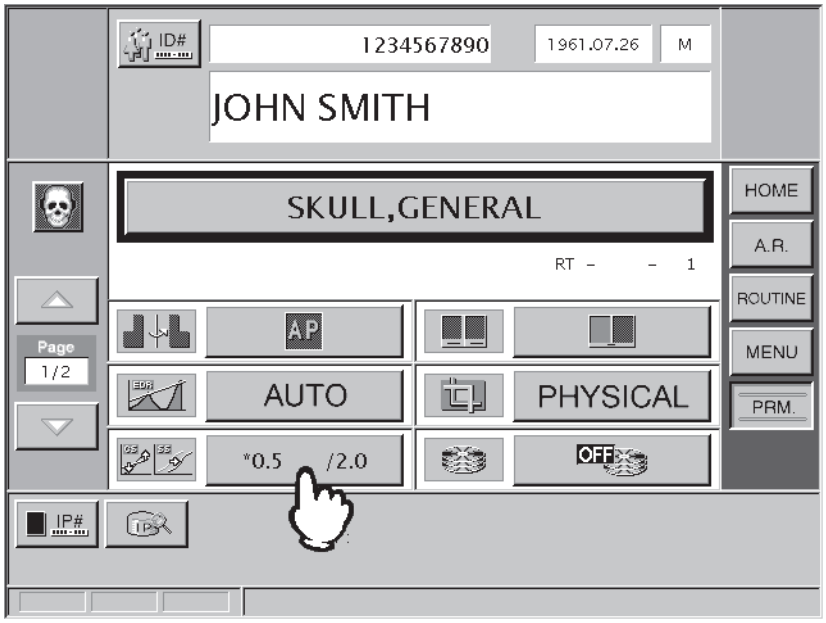
## Step5. C-Shift/S-Shift

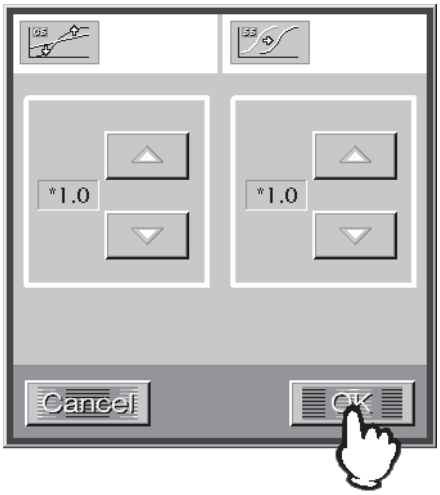
Sets the C-Shift (contrast) and the S-Shift (density) of the image.

Press the menu button.




The C-Shift/S-Shift setting box will be displayed.

Press ▲ / ▼ and set the value, and press OK ( F5 key). The C-Shift/S-Shift is set, and the box will be closed.




**(C-Shift) :** Coefficient given to the parameter concerning the tonal curve. Changes the contrast of the image. Can be set in the range of *(×)0.5 to *2.0.

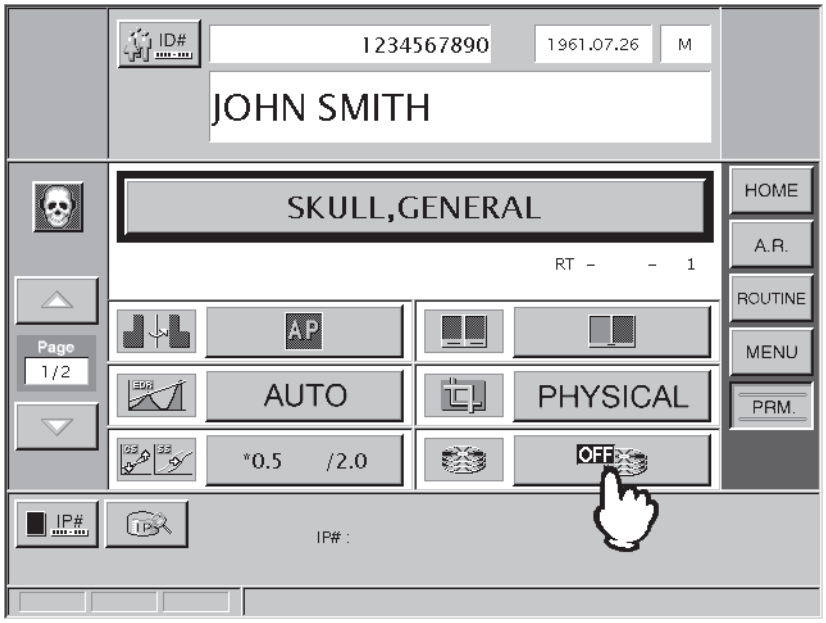
**(S-Shift) :** Coefficient given to the parameter concerning the reading sensitivity. Changes the display density of the image. Can be set in the range of /(÷)2.0 to *(×)2.0.

Cancel **:** Cancels the operation.

## Step6. Filing Mode

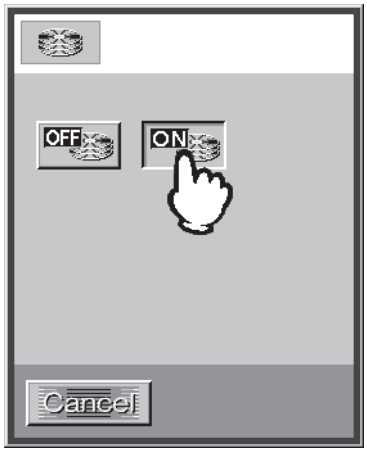
Sets the filing mode to file images to ODF (Optical Disc Image Filing Unit).

Press the menu button.




The filing mode setting box will be displayed.

Press either button. The filing mode of images is set, and the box will be closed.



: Does not record images to ODF.

: Record images to the ODF.

: Cancels the operation.



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## Step7. Number of Films Output

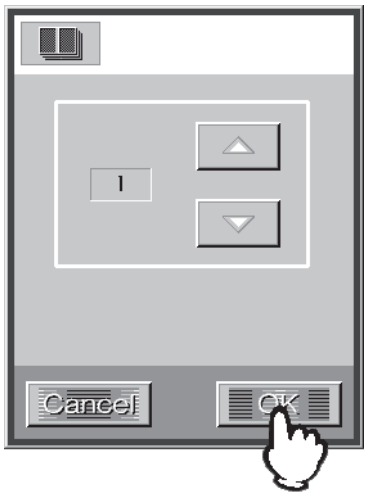
Sets the number of film output of images.

Press the menu button.

The number of film output setting box will be displayed.

Press ▲ / ▼ and set the number of film output, and press OK ( F5 key). The number of film output of images is set, and the box will be closed.

The number of film output that can be set depends on the setting at the time of the installation of the unit. If the filing mode is set to OFF, do not set “0” to the number of films output.




Cancel **:** Cancels the operation.

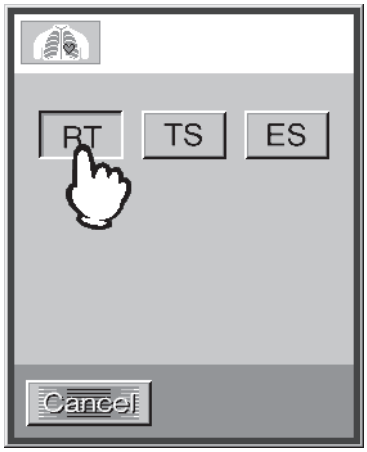
## Step8. Function

Sets the function (special processing implemented according to the exposure method of the image).

Press the menu button.

The function setting box will be displayed.

Press one of the buttons. The function is set, and the box will be closed.




RT : Routine processing (normal exposure).
TS : Temporal subtraction processing.
ES : Energy subtraction processing.
Cancel : Cancels the operation.



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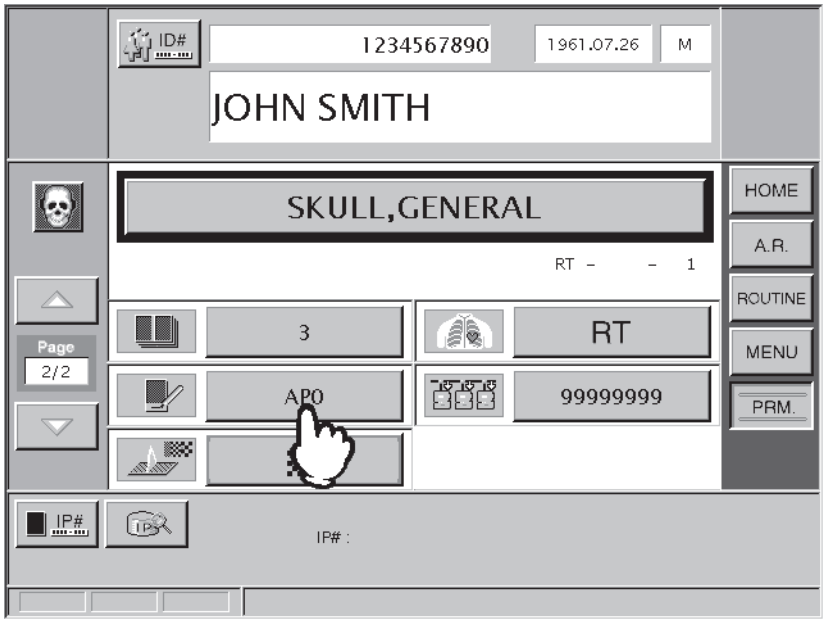
## Step9. Film Mark

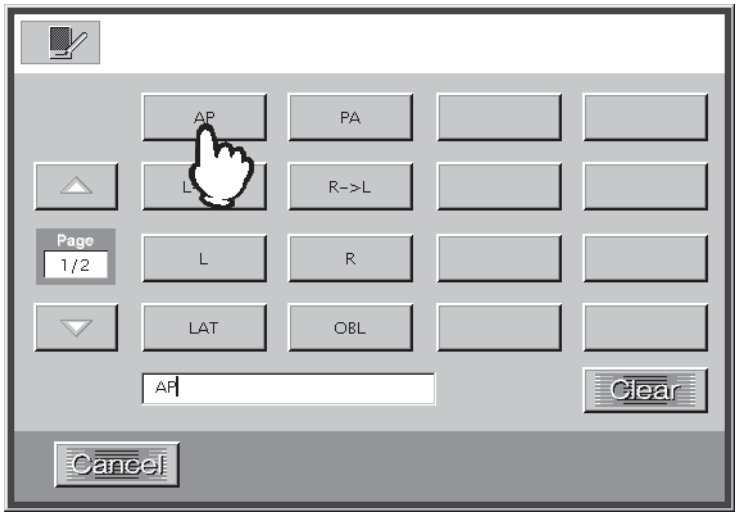
Sets the film mark (the character to indicate the exposure direction shown on the film).

Press the menu button.




The film mark setting box will be displayed.

Press the film mark button. The film mark is set, and the box will be closed.




Clear **:** Clears the current setting and goes back to the Anatomical Region Selection (A.R.) Screen.
Cancel **:** Cancels the operation.

The film mark currently set is shown in the text box. Any characters can be input in the text box using the hardware keyboard. Input characters, and press Enter key.

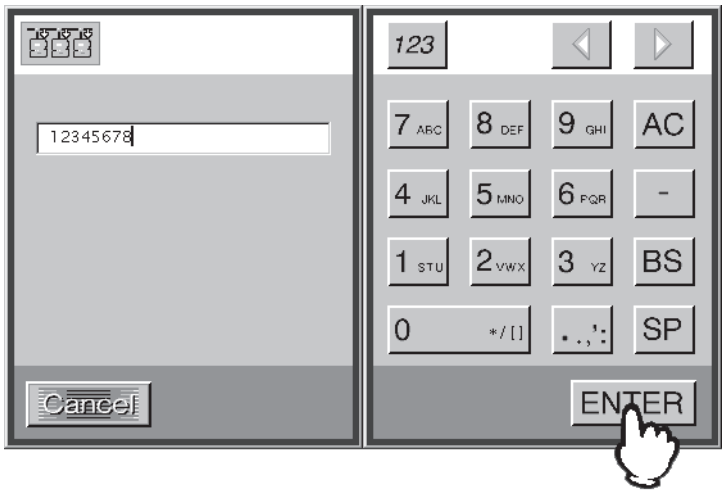
## Step10. Distribution Code

Sets the distribution code (the code number to specify the destination of the transfer) of images.

Press the menu button.

The distribution code input box and the software key board will be displayed.

Input the distribution code, and press ENTER ( Enter key). The distribution code of the image is set, and the box and the software keyboard will be closed.




Cancel **:** Cancels the operation.



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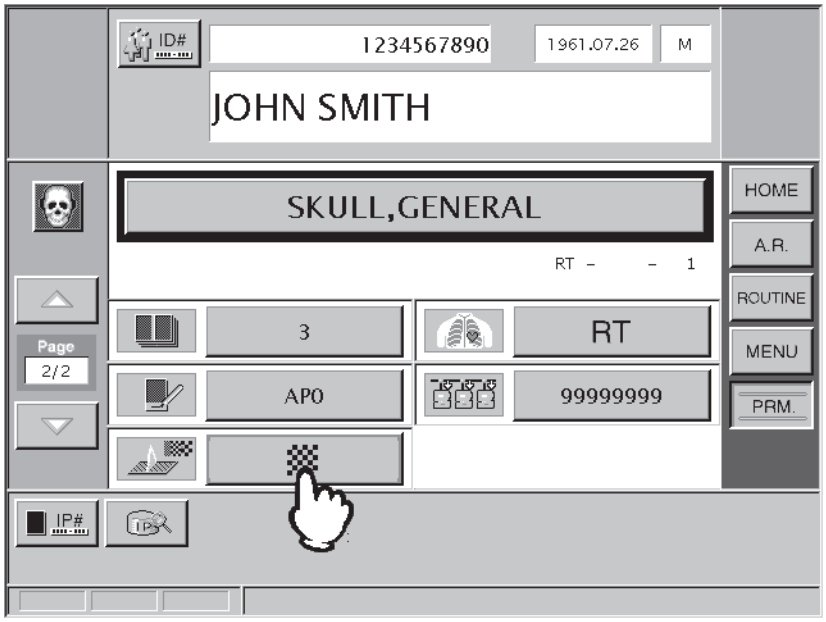
## Step11. Pixel Density

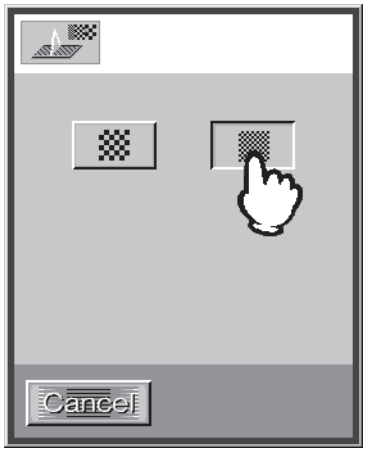
Sets the pixel density of the image.

Press the menu button.




The pixel density setting box will be displayed.

Press either button. The pixel density of the image is set, and the box will be closed.

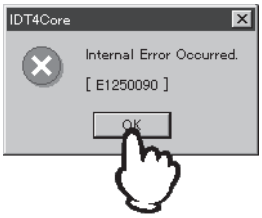



: Standard density.
: High density.

# 5 TROUBLE SHOOTING

## 1 Method to Deal with Errors

If an error occurs while the unit is running, the following alert box that shows an error message and an error code will be displayed. In this case, press OK in the alert box and end the unit once, and then restart the unit.




If the unit will not be ended or restarted, or if the same error frequently occurs, consult a service engineer.



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# 2 When These Happen...

## The unit will not start...

If the unit will not start by pressing the starting/ending button, check and try the followings.

→ **Is the power cable connected?**
Properly connect the power cable to an AC outlet.

→ **Is the power switch on the back of the unit in the power-on state?**
Press " I " side of the power switch.

## Nothing is displayed on the display...

If nothing is displayed on the display although the unit is started, check and try the followings.

→ **Is the screen saver off?**
Lightly touch the display.

→ **Is the luminance properly adjusted?**
Adjust the luminance with the knob on the side of the unit (page *60*).

## Display is difficult to see...

If the displayed screen is difficult to see, check and try the followings.

→ **Is the luminance properly adjusted?**
Adjust the luminance with the knob on the side of the unit (page *60*).
And also, LCD display may be difficult to see depending on the viewing angle. Adjust the angle of the display.

# 6 MAINTENANCE

## 1 Maintenance by Users

### ■ Cleaning the Display

If the surface of the display gets smudged or dusty, end the unit and wipe it with soft clothe. If the smudge is severe, use soft clothe soaked in water and squeezed tightly to wipe it out. Exercise care to wipe the surface of the display because it is easily scratched.

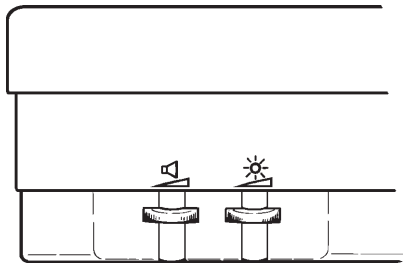
### ■ Replacing the Display

The FL tube (cold cathode tube) for side light equipped to the display loses its luminance as it is used, and the displayed screen gets darker. If the displayed screen is difficult to see, consult a service engineer. The display can be replaced at the user's charge.

### ■ Adjusting Display Luminance/Beep Sound

The luminance of display and the volume of the beep sound can be adjusted with the adjustment knobs on the side of the unit.

The luminance of display is adjusted with ☼ knob. The volume of the beep sound is adjusted with the 🔈 knob. Use these knobs if necessary.





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# 2 Periodic Inspection

After the guarantee period, periodic inspection by maintenance contract is recommended for maintaining the performance of the unit.

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